

### **REMARKS**

Applicants herewith submit formal drawings.

Applicants hereby affirm the election of Invention I (claims 1-21) with traverse.

Applicants herewith submit a Terminal Disclaimer.

Claims 1-42 are pending in the application.

Claims 8-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Scheying et al. in view of Yajima et al.

Claims 1, 8, and 18 herewith are amended. Claims 22-42 have been cancelled.

Reconsideration and allowance of the claims as amended is requested for the following reasons.

The present invention is directed to a method of making a feedstock for injection molding, including the steps of:

a) mixing at a temperature of at least 100° C polymeric materials having a thermal conductivity in the range of 0.001 to 0.01 cal/cm-sec-° C wherein the polymeric materials are selected from the group consisting of polyethylene, polystyrene, polyester, and polycarbonate or combinations thereof, and one or more materials selected from the group consisting of ceramics, ceramic composites, metals and metal alloys in a blended relationship to form a viscous phase mixture, the materials in the viscous phase mixture being selected so that when in a solid phase it has a density greater than 4 grams/cc and a thermal conductivity greater than 0.101 cal/cm-sec-° C and;

b) cooling the blended viscous phase mixture to form the feedstock.

Claims 1 and 8 have been amended to emphasize the feature of mixing polymeric materials and other materials at a temperature range of 100-150°C. Support for the amended claim can be found in the specification on page 3, lines 1-4 and lines 21-24. Claim 18 has been amended in light of the Examiner's suggestion.

### **The 103 Rejections**

The Applicants addresses the problem of making an aesthetically pleasing polymer composite body that will have substantial weight or mass and have good tactile properties. The cited prior art of Scheying et al. and Yajima et al. do not

address this problem. In fact, Scheying explicitly does not address aesthetic properties of polymer compounds used in the form of injection molded bodies, see Col. 4, lines 28-30. More importantly, Scheying does not disclose mixing polymeric materials within the temperature range of 100-150<sup>0</sup>C. In stark contrast to Applicants' present invention, Scheying does disclose removing all polymers prior to sintering, hence, leaving only a ceramic body; unlike the ceramic-polymer composite that results from Applicants' claimed invention.

Referring to the combination of Scheying with Yajima, the Examiner acknowledges that Scheying does not disclose a solid ceramic-polymer composite having a thermal conductivity greater than 0.101 cal/cm-sec-<sup>o</sup>C. It should also be noted that the Be-composite material disclosed in Yajima will not be suitable for mixing with the polmeric materials at 100-150 <sup>0</sup>C, because Beryllium metal has a melting characteristically higher than light metals, at 1,285<sup>0</sup>C.

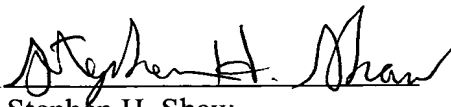
Consequently, the Examiner has failed to make a prima facie case, because one or more of Applicants' features are missing in the cited combination; and moreover, Applicants' claimed invention would not result from the cited combination.

Specifically, since neither Scheying nor Yajima discuss the problem of how to fabricate an aesthetically pleasing injection molded article there would be no motivation in the cited art to modify the teaching of Scheying in light of Yajima. Furthermore, even if the teaching of Scheying were modified in light of Yajima, Applicants' invention would not result, since neither Scheying nor Yajima teach, show, or suggest making a solid ceramic-polymer composite having a density greater than 4 grams/cc and a thermal conductivity greater than 0.101 cal/cm-sec-<sup>o</sup>C from mixing polymers and other materials at a temperature range of 100-150<sup>0</sup>C. It is believed that independent claims 1 and 8 are unobvious in light of the combination Scheying in view of Yajima . The remainder of the claims are dependent from these claims and are considered to be patentable for at least the same reasons.

Applicants have reviewed the cited art made of record, including Scheying et al., Yajima et al., Chatterjee et al., Carlton et al., Yoshino et al., Okada et al., and Tahara et al., and believe that singly or in any suitable combination, they do not render Applicants' claimed invention unpatentable. It is believed that the claims in the application are allowable over the cited art and such allowance is respectfully requested.

Should the Examiner consider that additional amendments are necessary to place the application in condition for allowance, the favor is requested of a telephone call to the undersigned counsel for the purpose of discussing such amendments.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Stephen H. Shaw", written over a horizontal line.

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Enclosures: Replacement Figure 1 (2 copies)